UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

MARCH 1969

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

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Fishery-Oceanography Center
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*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, U. S. Custom House, Terminal Island, California

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

MARCH 1959

PART II--Fishing Information

Sea-surface temperatures, fishing and receipts (primarily of interest to the West Coast long-line fishery industry and boating sportsmen)

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SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN
MARCH 1969

Acknowledgements

The following organizations and stations contributed data for the March 1969 charts:

U. S. Bureau of Commercial Fisheries Biological Laboratories La Jolla, California, Honolulu, Hawaii and Seattle, Washington

U. S. Naval Weather Service, Fleet Numerical Weather Central Monterey, California

Environmental Science Services Administration U. S. Weather Bureau, San Diego, California

U. S. Coast and Geodetic Survey, Pacific Marine Center, Seattle, Washington

General Dynamics Convair Division; Ocean Data Buoy BRAVO

Hopkins Marine Station, Pacific Grove, California, J. P. Balesteri

Inter-American Geodetic Survey by David Ortega at Manzanillo, Mexico; R. H. Peren at Pt. Armuelles, Panama; V. E. Castillo at Tumaco, Colombia; S. Valenzuela at La Libertad, Ecuador; O. Rodriguez at Talara, Peru; Pedro Chauca at San Juan, Peru; Arica, Antofagasta, Caldera, Valparaiso, Talcahuano, Chile, through the courtesy of St. Hellmuth A. Sievers C. at the Instituto Hidrografico de la Armada, Valparaiso, Chile

Kelco Company, San Diego, California

Matson Navigation Company, San Francisco; S. S. CALIFORNIAN

Pacific Missile Range, Range Operations Department, Geophysics Division Point Mugu, California

Pacific Oceanographic Group, Nanaimo, British Columbia, by H. J. Hollister from observations by G. C. Wilks at Langara Island Light; C. Olsen at Cape St. James Light; Lily Collins at Kains Island Lightstation; O. A. Edwards at Amphitrite Point Light

Scripps Institution of Oceanography, La Jolla, California, by Margaret Robinson and Hans Klein

Scripps Institution of Oceanography Research Vessels; ALEXANDER AGASSIZ, ARGO, FLIP, ELLEN B. SCRIPPS, THOMAS WASHINGTON

Ralston Purina Company, Van Camp Sea Food Division, Terminal Island, California

Fishing Vessel MARTINAC

Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 8000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2.--Deviation of sea surface temperatures (°F) from long term charts of H. O. 225. Hatched areas are colder in 1969.

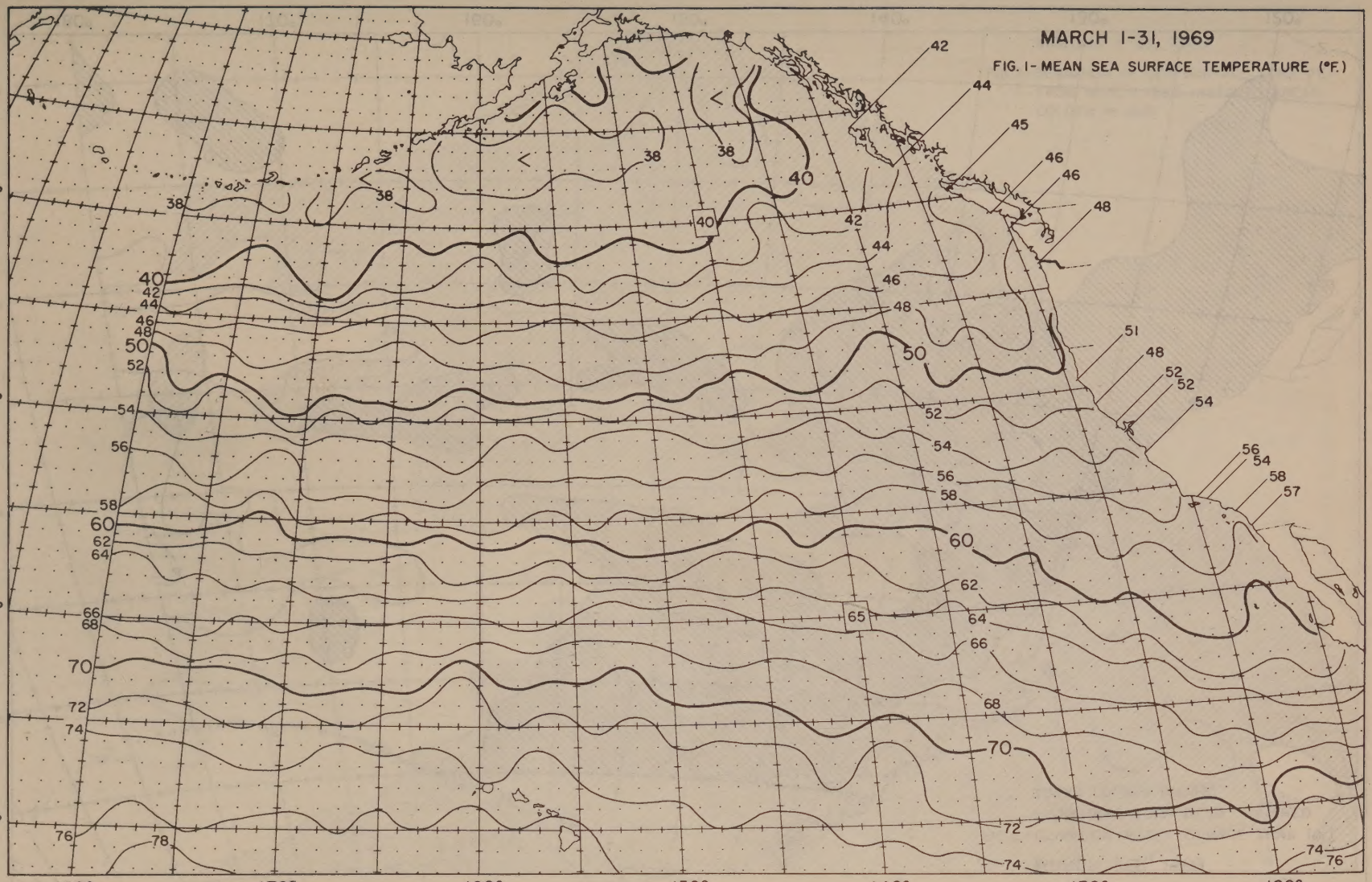
Figure 3.--Deviation of sea surface temperatures (°F) from those of March 1968. Hatched areas are colder in 1969.

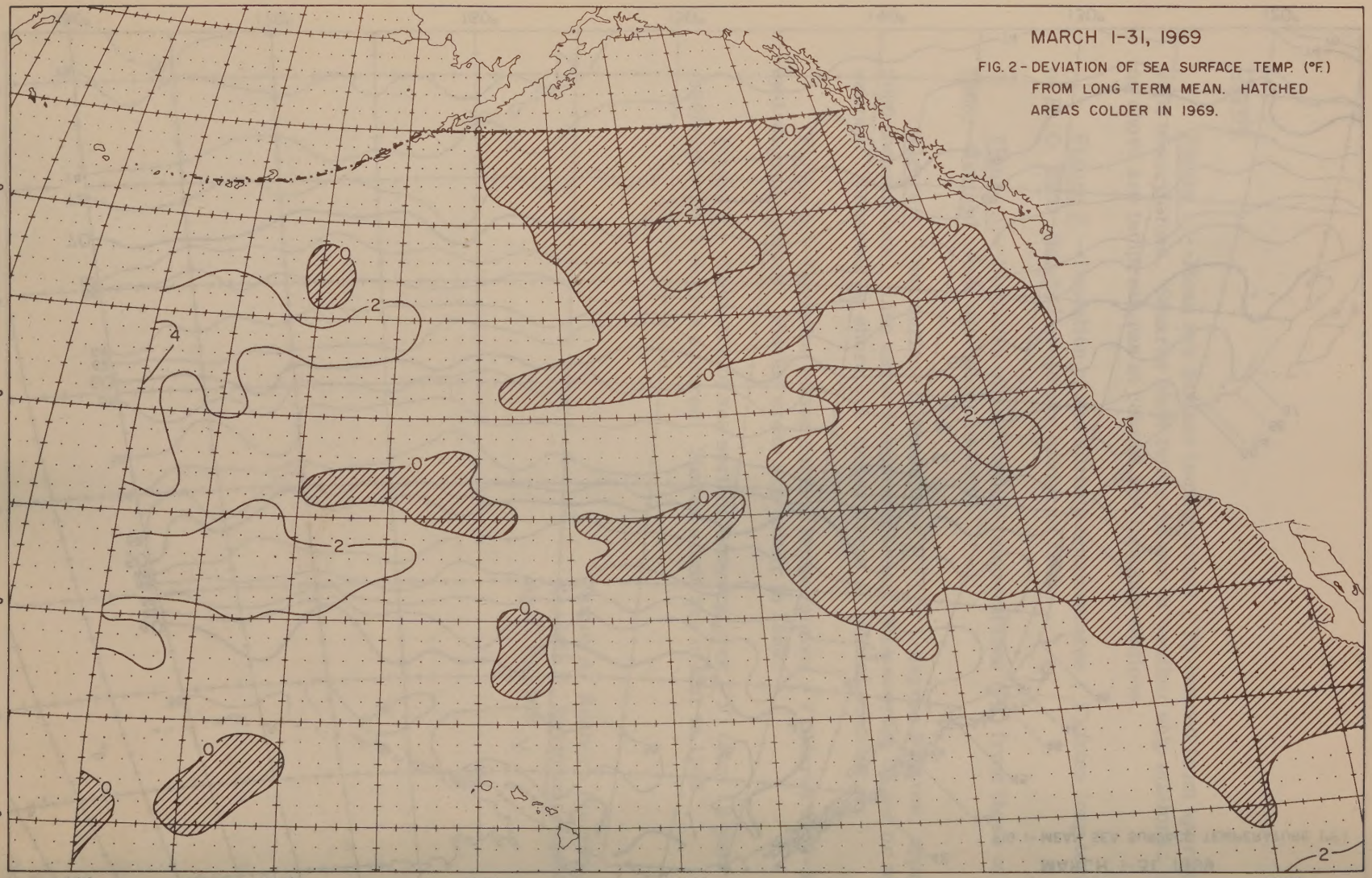
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

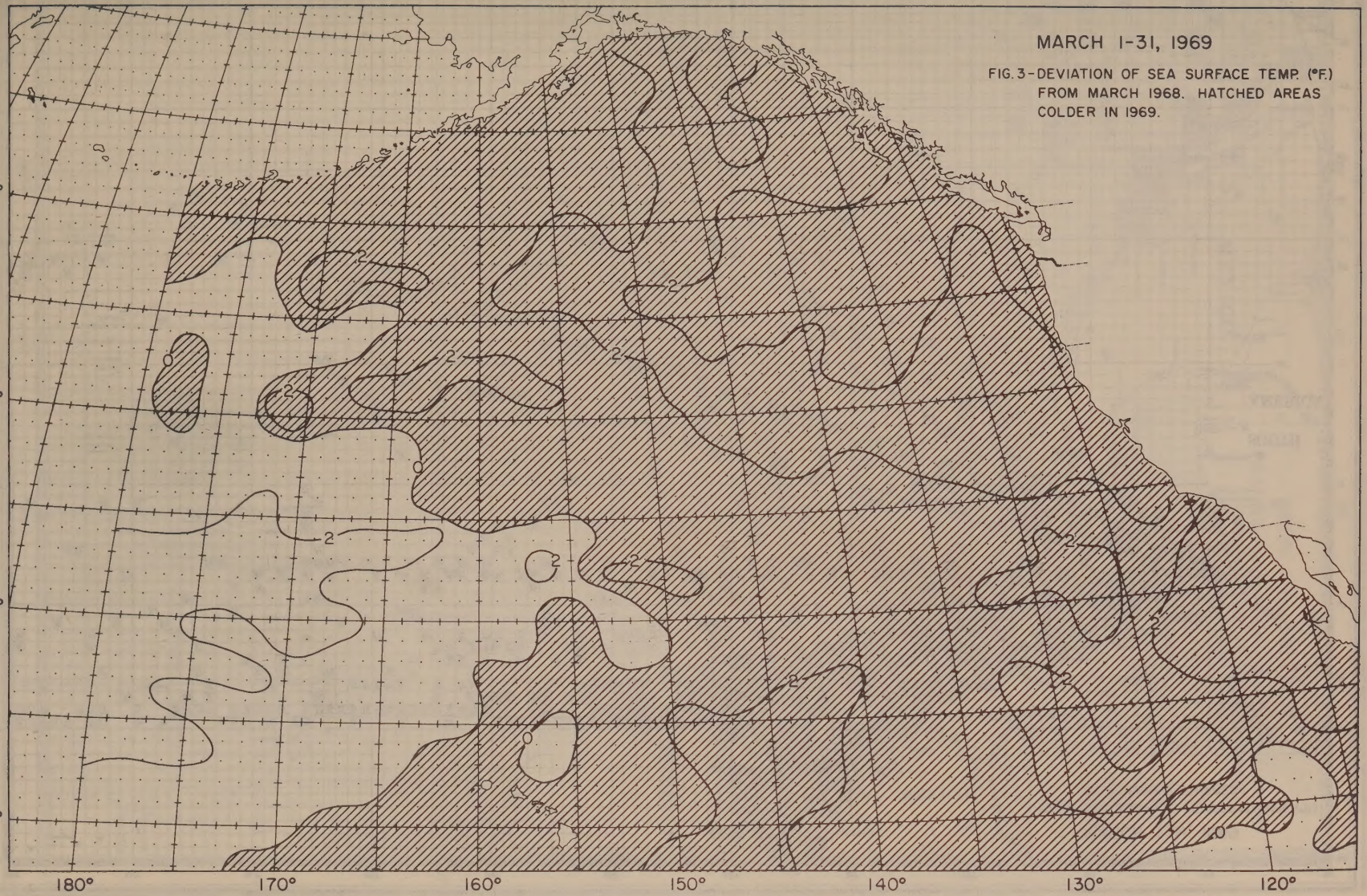
Figure 5.--Deviation of sea surface temperatures (°F) March 1969-March 1968 by 1-degree squares. Shaded areas are colder in 1969.

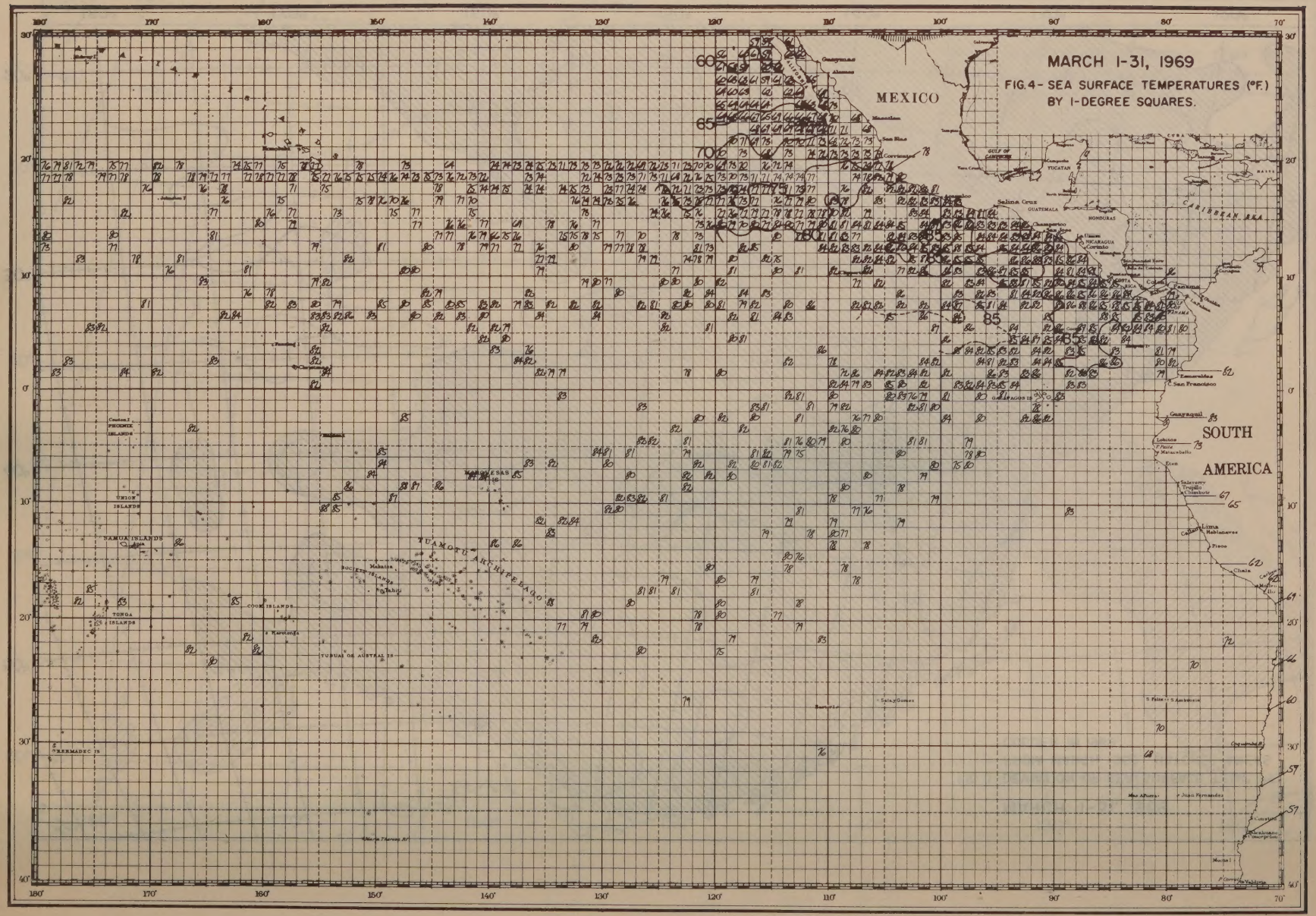
Figure 6.--Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1969.

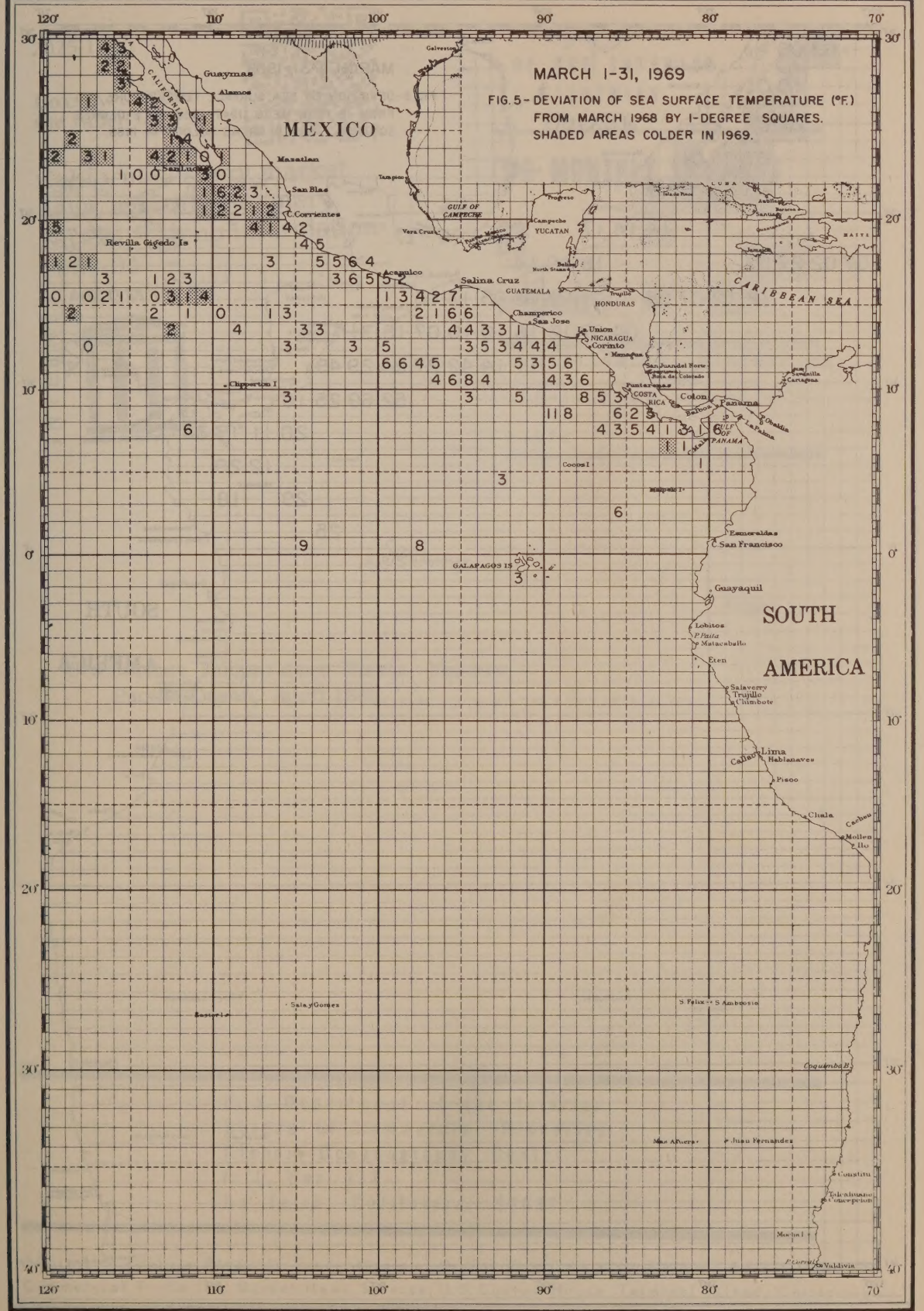
James A. Renner, Fishery Biologist
Kenneth S. Raymond, Scientific Illustrat
April 9, 1969

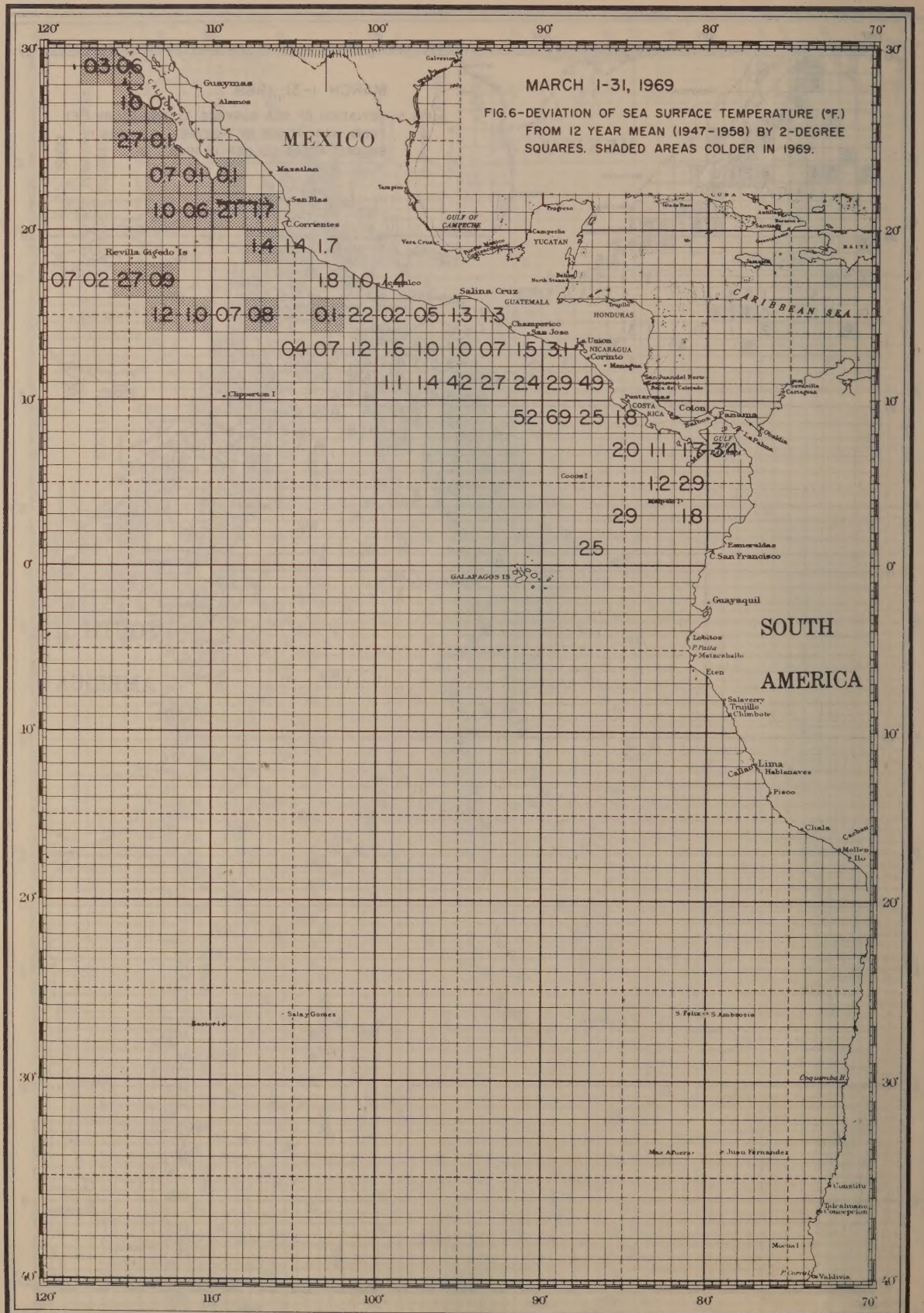

MARCH 1-31, 1969
FIG. 1- MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°


MARCH 1-31, 1969
FIG. 2 - DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1969.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
0
2
4


MARCH 1-31, 1969
FIG. 3 - DEVIATION OF SEA SURFACE TEMP. (°F.) FROM MARCH 1968. HATCHED AREAS COLDER IN 1969.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
2
0


MARCH 1-31, 1969
FIG. 4 - SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
GUATEMALA
HONDURAS
NICARAGUA
PANAMA
CUBA
HAITI
JAMAICA
GULF OF CALIFORNIA
GULF OF MEXICO
YUCATAN
PHOENIX ISLANDS
UNION ISLANDS
SAMOA ISLANDS
TUAMOTU ARCHIPELAGO
COOK ISLANDS
TONGA ISLANDS
MARQUESAS
EASTER I.
GALAPAGOS IS.
Salina Cruz
Guayaquil
Lima
Callao
Pisco
Chimbote
Salaverry
Trujillo
Paita
Talara
Tumaco
Esmeraldas
San Francisco
Manzanillo
Acapulco
Puerto Angel
Salina Cruz
Champerico
Corinto
Puntarenas
Balboa
Cristobal
Colon
Barranquilla
Maracaibo
La Guaira
Curacao
Aruba
Trinidad
Tobago
Juan Fernandez
Valparaiso
Antofagasta
Iquique
Arica
Mollendo
Callao
Pisco
Chimbote
Salaverry
Paita
Talara
Tumaco
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Paita
Salaverry
Trujillo
Chimbote
Callao
Lima
Pisco
Chile
Valparaiso
Antofagasta
Iquique
Arica
Mollendo
Juan Fernandez
Easter I.
Galapagos Is.
Marquesas
Tuamotu Archipelago
Phoenix Islands
Union Islands
Samoa Islands
Cook Islands
Tonga Islands
Tubuai Is. Austral Is.
Raivavae
Rapa
Rurutu
Tahiti
Makatea
Pukapuka Islands
Kermadec Is.
Salas y Gomez
San Felix
San Ambrosio
Juan Fernandez
Mas Afuera
Mocha I.
Isla Santa Maria
Isla Mocha
Isla Juan Fernandez
Isla Mas Afuera
Isla Salas y Gomez
Isla San Felix
Isla San Ambrosio
Isla Galapagos
Isla Marquesas
Isla Tuamotu
Isla Phoenix
Isla Union
Isla Samoa
Isla Cook
Isla Tonga
Isla Tubuai
Isla Raivavae
Isla Rapa
Isla Rurutu
Isla Tahiti
Isla Makatea
Isla Pukapuka
Isla Kermadec
Isla Easter
Isla Galapagos
Isla Marquesas
Isla Tuamotu
Isla Phoenix
Isla Union
Isla Samoa
Isla Cook
Isla Tonga
Isla Tubuai
Isla Raivavae
Isla Rapa
Isla Rurutu
Isla Tahiti
Isla Makatea
Isla Pukapuka
Isla Kermadec


MARCH 1-31, 1969
FIG. 5 - DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM MARCH 1968 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1969.
MEXICO
CALIFORNIA
Guaymas
Alamos
Masatlan
San Blas
Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
La Union
NICARAGUA
Corinto
Managua
COSTA RICA
Punta Arenas
Colon
Panama
Balboa
GULF OF PANAMA
Chipperton I
Coops I
Esmeraldas
San Francisco
GALAPAGOS IS
Guayaquil
SOUTH AMERICA
Lobitos
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Pisco
Chala
Mollendo
Ilo
Sala y Gomez
S. Felix
S. Ambrosio
Juan Fernandez
Valdivia
CARIBBEAN SEA
GULF OF MEXICO
YUCATAN
CUBA
JAMAICA
HAITI
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°


MARCH 1-31, 1969
FIG. 6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1969.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CALIFORNIA
GULF OF PANAMA
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Salina Cruz
Champerico
San Jose
La Union
Corinto
Managua
Punta Arenas
Clipperton I
Coco I
Coiba I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Eten
Salaverry
Trujillo
Chimbote
Callao
Lima
Hablanaves
Pisco
Chala
Mollendo
Ilo
Sala y Gomez
Easter I
S. Felix
S. Ambrosio
Juan Fernandez
Mas Afuera
Constitu
Concepcion
Mocha I
Valdivia
Galveston
Tampico
Vera Cruz
Mexico
Progreso
Campeche
YUCATAN
Belize
North Stann
Trujillo
HONDURAS
GUATEMALA
Tela de Paso
Santiago
Jamaica
HAITI
Cartagena
Colon
Panama
Balboa
Cebaco
Coiba I
120°
110°
100°
90°
80°
70°
30°
20°
10°
0°
40°